

### **REMARKS/ARGUMENTS**

By this Preliminary Amendment, Applicants respond to the Office Action dated December 19, 2003 ("the Office Action") in the parent case, in which claims 1, 3-11, and 13-19 were rejected. Claims 2 and 12 were previously canceled. By this Preliminary Amendment, claims 1, 3, 5-9, 11, 13, and 15 have been amended, claims 4 and 14 are canceled, and new claims 20-25 have been added. Accordingly, claims 1, 3, 5-11, 13, and 15-25 are now pending.

#### **103 Rejections**

The Office Action rejected claims 1, 3-11, and 13-19 under 35 U.S.C. 103(a) as being unpatentable over Bienvenu et. al., U.S. 6,526,438, in view of Brown et. al., U.S. Patent No. 5,941,947. Applicants respectfully submit that Claim 1, as amended, is allowable over the art of record for at least the reasons described herein.

First, Applicants respectfully disagree with a particular characterization regarding Brown et. al. made in Paragraph 2 of the Office Action:

"... Brown teaches a hierarchical database where users are signed into groups such that users of a particular group can inherit the access rights of [the] ancestor group. For example, Brown teaches a situation where if a user is 18 years old has an access to an 18 years old folder, that user has also the privilege to access the public directory (i.e. the ancestor or predecessor folder) (see col. 19, lines 52-60)."

However, as understood, although Brown's "Directory Service structure" is a "hierarchical directory structure" that is in the form of "directed acyclic graphs", that Directory Service structure is not used to determine access rights. Rather Brown et

al.'s Directory Service structure represents a content organization and interactive navigational scheme for a user, which are purposes different than, and generally independent of, access rights determinations for a particular user. As discussed at col. 14, line 52 – col 15, line 4, an Explorer program of a client microcomputer is used to reconstruct user-selected portions of the Directory Service on the user's screen. The user double-clicks on a selected nodes to expose other nodes that may be associated with the selected node. *However*, as discussed at col. 15, lines 5-25, before "showing" a node to the end user, the Directory Service must consult a *separate* access rights database 152 to determine whether the end user has rights to access the desired node. Depending on the contents of the *separate* access rights database 152, the user might, *or might not*, have access to an ancestor node of a particular node of the Directory Service structure. The example cited in Paragraph 2 of the Office Action (regarding 18-year-old/public folder access) was an incidental outcome of using the access rights database 152, which is not disclosed in Brown et. al. as having a directed acyclic graph structure or eligibility inheritance features based thereon.

Importantly, with particular reference to FIG. 6 of Brown et. al, the access rights database 152 does not have the property that "clients assigned to a particular group are eligible for events assigned to the particular group as well as events assigned to all ancestor groups of the particular group" as recited in the amended Claim 1. Rather, the access rights database 152 of Brown et. al. appears to comprise an arguably "conventional" relational database scheme comprising a first

table 602 that maps members into groups, a second table 604 that maps groups into so-called "tokens," and so on.

One of the advantages of the method recited in Claim 1 as amended is that a summary event listing can be built very quickly for a given requesting client, in real time, simply by starting at the group node of the requesting client, identifying the events at that node, and then working up the chain(s) of ancestors to immediately identify the events in all the ancestor nodes. As the number of members and events grows into the thousands and even millions, the approach of Claim 1 as amended is believed to perform better than other approaches along the lines of Brown et al. Indeed, Brown et al. seems to imply that the table structures of FIG. 6 would yield sluggish performance as the numbers got large, insofar as Brown et al. discusses a variety of "compression" schemes for the access control matrix (col. 18, lines 57-67) to make things more manageable. Even then, at col. 24 line 13 Brown et al. proceeds to discuss "access rights caches" to reduce the frequency of queries to the security servers.

In contrast, it is believed the approach of Claim 1, as amended, is highly scalable and performs well even for very large numbers of clients and content entities (events). The ability to generate the event summaries in real time is consistent with the limitation "responsive to receiving said ticket request", which indicates that the event summary can be built in real-time at the time of the request. It is to be appreciated, however, that the above comments should not be construed to limit the scope of the claimed invention to systems without caches, because

various caching schemes could probably, of course, serve to make the response of the system still faster.

In summary, it is respectfully submitted that Brown et al. does not teach or suggest "responsive to receiving said ticket request, deriving the event summary from a hierarchical database comprising a plurality of groups, wherein each group can be assigned one or more clients and one or more events, and wherein the hierarchical database further comprises a directed acyclic group structure in which clients assigned to a particular group are eligible for events assigned to the particular group as well as events assigned to all ancestor groups of the particular group" as recited in Claim 1 as amended. Therefore, any combination of Bienvenu et al. and Brown et al. would not disclose or suggest such a limitation. In view of the above arguments, it is to be appreciated that the current amendments to Claim 1 have been made primarily for reasons relating to readability.

For reasons similar to those presented above in relation to Claim 1, it is further submitted that independent claims 11 and 19 are likewise patentable over Bienvenu et al. in view of Brown et al. It is submitted that each of the pending dependent claims 3, 5-10, 13, and 15-18 are allowable as depending from an allowable base claim.

#### **New Claims 20-25**

New claims 20-25 have been added to round out the scope of protection for the Applicants' invention. Each of the claims 20-25 is supported by the specification text and/or drawings as initially filed and no new matter has been added.

### CONCLUSION


In view of the foregoing remarks, Applicants submit that this claimed invention is allowable over the references cited against this application. Applicants therefore respectfully request the entry of this Preliminary Amendment, reconsideration of the application, and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916 .

Respectfully submitted,

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Dated: June 17, 2004

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